GW200C USER'S MANUAL

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*** Important ***
Read User's Manual Completely Prior to Operating, Towing, or Servicing Wagon

GW200C

CUSTOMER: _____

SERIAL # _____

V.I.N. _____

WEIGH TRONIX SERIAL # _____

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Additional User Manual's

-Briggs & Stratton® Operator/Owner Manual

-Weigh Tronix™ Model 640 User's Manual

-Shurco Owner's Manual

-Wallace Forge

Note: This manual supersedes any other information supplied by Par-Kan Company before this date, and is good only for serial numbers listed in the manual.

Par-Kan Company - Grain Weigh Division
Model GW-200C One Year Warranty

Par-Kan Company's Grain-Weigh Equipment is warranted to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of purchase as dated on Grain-Weigh's original invoice.

Grain-Weigh will replace during the warranty period, subject to an examination by an authorized representative of Grain-Weigh, any warranted part which proves defective in material and/or workmanship under normal installation, use, and service. Parts must be returned, and transportation charges prepaid to our factory. Any changes to the Grain Weigh equipment as a result of modifications, misuse, abuse, neglect, accident, vandalism, fire, flood, other acts of God, or improper installation will void this warranty. Treating seed in unit will void the warranty. Par-Kan is not responsibility with seed used in any unit.

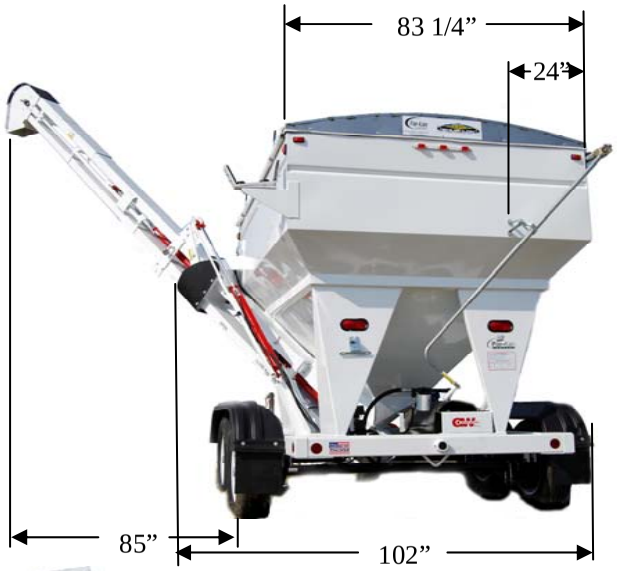
If Par-Kan Grain-Weigh receives notice of any such defect during the warranty period. Grain-Weigh will, at its discretion, repair or replace components which prove to be defective. Other manufacturer's warranties may apply for components installed on Grain-Weigh equipment. Grain-Weigh makes no other warranty, either expressed or implied, with respect to this product. Any special, incidental, or consequential damages arising from any breach of warranty are specifically excluded hereunder.

Manufacturer's Warranties:

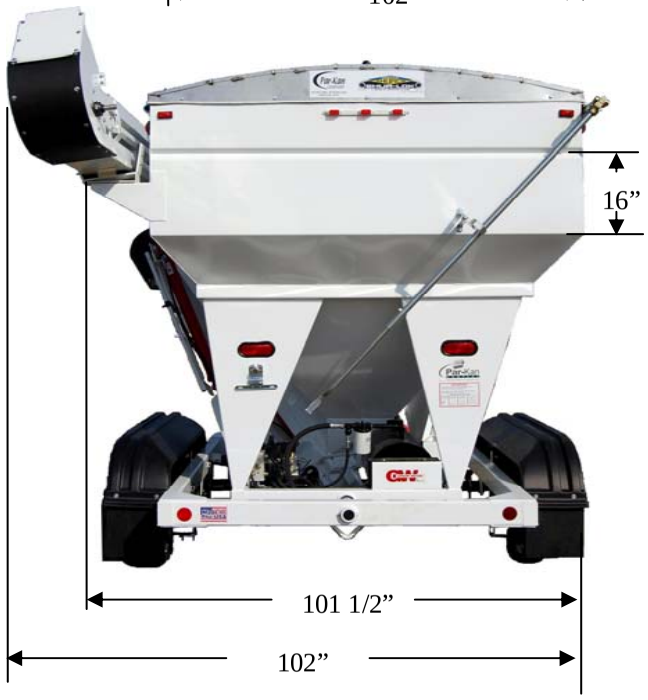
Axis Axles, 1 Year Warranty

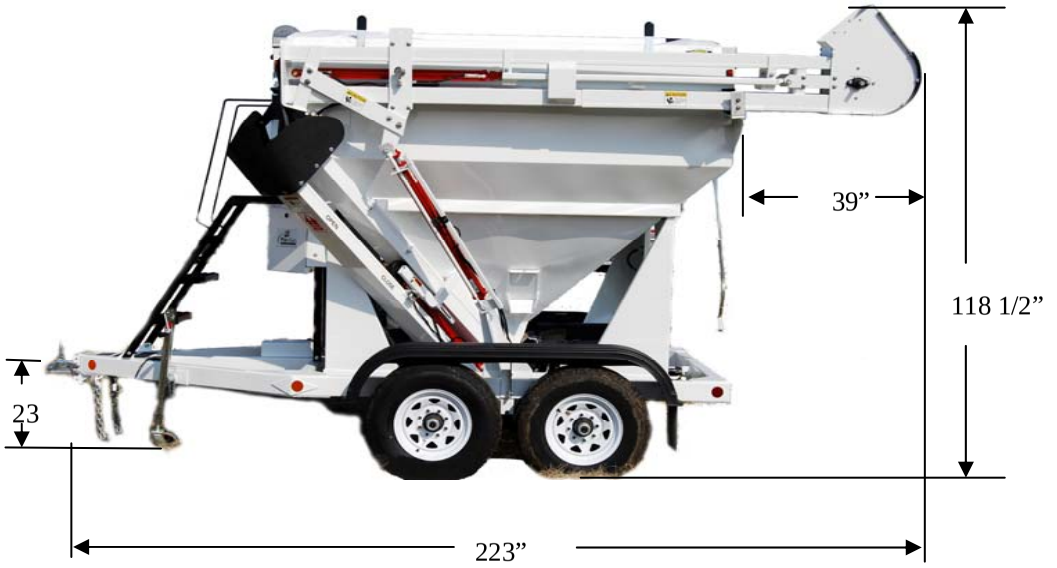
Weigh Tronix™ Scale System, 3 Year Warranty

Briggs & Stratton® 18 H.P. Vanguard Engine, 2 Year Warranty


83 1/4”
24”
85”
102”

106 1/2”
170”
117”


16”
101 1/2”
102”


39”
118 1/2”
23
223”

Grain-Weigh 200C General Specifications & Features

1. Weigh Tronix™ Model 640 Farm Indicator – 2 lb. increment.
2. Briggs & Stratton®, 18 HP Vanguard Engine With Electric Start (Pull start backup system.)
3. 14,000 lb. Axis Tandem axle.
4. ST235//80 R16, 8-Bolt Tires
5. Capacity: 200 Bushels.
6. Hydraulically Driven Conveyor Belt
7. 2-5/16” Ball Coupler – rated at 14,000 lbs.
8. Standard Cart Has an Approximate Empty Weight of 4200 lbs. without options.
9. Tongue Jack with Swivel Wheel
10. Towing Vehicle Hitch **MUST** be Rated at 14,000 lbs.
11. 6-1/2 Gallon Plastic Gasoline Tank.
12. 8” wide X 2” cleated conveyor belt
13. 14,000 lb Towing Capacity Maximum

Grain Weigh 200C Safety and Operating Precautions

1. Observe all safety precautions listed in this manual
2. No riders
3. Stand clear of all moving parts while in operation.
4. Make no adjustments while cart is running.
5. Cart can be loaded without being hitched, but should be on level ground while loading.
6. Do not touch or allow unit to come in contact with overhead electrical wires.
7. Gasoline tank should not be filled while engine is running or hot.
8. “Conveyor Run” and “Belt Tension” switch must be turned off to store conveyor.
9. Consult the Briggs & Stratton engine manual for operating instructions before using.
10. Do not operate Briggs & Stratton® Engine over 3,000 RPM.
11. Do not transport with conveyor in raised position.
12. Proper height to top of 2-5/16” ball hitch on towing vehicle should not exceed recommended allowance of 23”
13. Do not load in excess of tire manufacturer ratings for either the GW200C cart or the towing vehicle.
14. Towing vehicle should be of adequate capacity.
15. The total cart weight should not exceed 14,000 lbs.
16. Wheel lug nuts must be tight.
17. Never enter the bin at any time.
18. Be aware of all information, caution, warning, and danger signs on the unit.
19. Be aware of hot hydraulic fluid in case of a hydraulic line break.
20. Below 10 degrees F., change hydraulic oil to SAE 5W30 motor oil.
21. The operation of this cart must comply with all federal and state laws.

Grain-Weigh 200C Operating Procedures

1. Check engine oil and fuel before starting engine.
2. Run engine and hydraulic system for 5 minutes to pre-warm hydraulic fluid prior to operating conveyor unit.
3. Refer to the Weigh Tronix Users Manual for details on key functions on the Model 640 Farm Indicator.
4. Weigh Tronix system will shut down if powered up prior to starting engine.
5. Receive grain into GW200C.
6. Record weight data for yield comparison if desired.
7. Toggle Switch #3 to the up position, to activate belt tension. Switch reference num ber is starting from the top of the panel counting in a downward fashion.
8. Toggle and hold Switch #4 up to display conveyor. While conveyor is displaying, operator must ensure belt cleats do not get pinched in the guard area.
9. Once conveyor is displayed, release Switch #4. Belt tension on pressure gauge should be around 450—500 psi. Gauge is located on upper conveyor section.
10. Toggle switch #5 to either the fast or slow position depending upon delivery re-quirements. Fast speed is recommended for seed delivery.
11. Toggle switch #6 to the “conveyor run” position to activate conveyor.
12. Toggle and hold switch #2, to open seed door. A light will illuminate on the electri-cal panel (or the remote control) to indicate where the unit will deliver around 8 bu/ min. at the current seed door opening for seed delivery in slow speed. Release switch to hold the seed door at preferred opening for use.

13. Transfer grain to receiving vehicle. Record weight data for yield comparison if desired for seed tendering.
14. Once the desired amount of grain is delivered, toggle and hold switch #2 down to close the seed door. Let the unit run 3 to 5 minutes after seed door is closed to assure remaining grain is cleared from the conveyor tube on the unit.
15. Toggle switch #6 down to “conveyor stop” position to deactivate conveyor belt.
16. Decrease engine rpm to idle throttle.
17. Turn off conveyor unit.

To Store Unit for Travel

1. Run engine and hydraulic system for 5 minutes to pre-warm hydraulic oil prior to before loading system.
2. Toggle and hold down switch #2, to ensure seed door is closed.
3. Toggle switch #3 down, this will turn off the belt tension.
4. Toggle and hold switch #4 to the “Store Conveyor” position. Once conveyor is stored, release switch.
5. Turn engine key to the off position. Unit is now ready for travel.

Grain-Weigh 200C Maintenance

Daily Check List:

-Check engine oil level (do not overfill).
-Fill gas tank for daily operation.
-Check for oil leaks.
-Check hydraulic oil level, **do not overfill** (SAE 10W30).
    -Fill 80% full (9.5 gallons)
    -Total Capacity: 12 gallons
-Inspect for loose nuts and bolts.
-Inspect for belt alignment and belt damage.
-Inspect and check that lights are working properly.
-Inspect safety chains for damaged.
-Grease top and bottom conveyor pulley bearings.
-Check tire pressure should be 80 PSI cold.
-Check and inspect for loose wheel lug nuts.

Seasonal Check List:

Inspect and pack wheel bearings.
Inspect for conveyor belt wear or damage.
Inspect discharge hood for excessive wear or damage.
Grease top and bottom pulley bearings.
Clean battery terminals.
Grease top conveyor hinge plate pin every 50 hours of operation.
Check Weigh Tronix for proper operation. (See Weigh Tronix manual.)
Service Briggs & Stratton engine. (See Briggs & Stratton manual.)
Empty gas tank for seasonal storage.
Change hydraulic filter after first 50 hrs of operation and every 300 hrs of operation, there after.
Wash and wax to maintain powder coat finish.
Check all fasteners for tightness.

Grain-Weigh 200C Operation of Maintenance Meter

Multi-Function Maintenance Meter: Hour Meter, Tachometer, and Service Alarm

Hour / Tachometer: These functions are fully automatic. Upon engine start the meter will show rpm's. At engine shutdown the meter displays the total accumulated running time (which cannot be reset).

Service Alarms: This function is also fully automatic. The meter has a dual flash alert displaying "CHG OIL & LUBE" at 25 operation hour intervals. The meter will begin flashing 1 hour before the 25 hour increment, and stop flashing 1 hour after.

Note: Consult the Briggs & Stratton Engine Manual for the engine's proper maintenance schedule. Also, consult this manual for the proper GW200C cart system maintenance schedule.

Grain-Weigh 200C Trouble Shooting

Problem	Cause	Test	Correction
Engine will not start	No fuel Bad connections Dead Battery Starter	Visual Meter Meter Meter	Add fuel Clean or replace Charge or replace Repair or replace
Selective hydraulic components not working (Conveyor Belt, Unloading Door, or Conveyor Tube Display)	Hydraulic Oil Solenoid or Electrical Connections Hydraulic Components	Visual Check the meter connection or switch that is not working correctly.	Add oil Fix faulty electrical connection or switch Replace faulty hydraulic component(s)
Conveyor will not display or store	Valve needs adjusted, cleaned, or replaced	Visual	Adjust Valve or clean (see page 14)
Fast Speed on conveyor low on torque	Valve needs adjusted, cleaned, or replaced	Visual	Adjust Valve or clean (see page 14)
Slow Speed on conveyor low on torque	Valve needs adjusted, cleaned, or replaced	Visual	Adjust Valve or clean (see page 14)
Belt Tension pressure not correct	Valve needs adjusted, cleaned, or replaced	Visual	Adjust Valve or clean (see page 14)
Weigh Tronix will not power up	Blown fuse Bad connections Dead Battery Other	Meter Meter Meter	Replace Clean or replace Charge or replace See Weigh Tronix Manual
Incorrect weights	Weigh Bar Wiring	Meter	See Weigh Tronix Manual Repair or replace *see pg. 10A for more details.
Hydraulic oil overheating	Engine over 3,000 RPM Low on Hydraulic Oil	None Visual	Keep engine at 3,000 RPM Add Oil
All Hydraulics will not operate	Blown Fuse Oil	Visual	Replace 10 amp fuse behind weigh head. Add Oil

Grain Weigh 200C Hydraulic Trouble Shooting

1. Hydraulics cease to operate.

- Verify engine is running at full power and not on one cylinder. Ensure vent on the gas cap is open for engine to receive fuel.
- Check for blown fuse behind the weigh head or refer to manual for override procedure.
- Visually check that the correct amount of hydraulic oil is in the reservoir tank.

2. If conveyor fails to raise or lower.

- Verify engine is running within the normal rpm range. (3,000 rpm)
- Test manual override system on the front manifold for proper working conditions.
- Adjust the flow control valve on the backside of the manifold.

3. If conveyor does not raise or lower smoothly.

- Verify the engine is running in the normal rpm range. (3,000 rpm)
- Adjust the flow control valve on the backside of the manifold.

The pre set adjustment for this flow control valve has been set as follows: Twist knob clockwise until snug, then twist counterclockwise 2 full revolutions and tighten down with 5/64” Allen wrench.

Grain-Weigh 200C Trouble Shooting

If the top portion of the conveyor bounces while it is being displayed or stored, valves #1 and #2 controls this part of the cart. By turning the valve clockwise it will slow the action of the conveyor. Likewise, turning the valve counter clockwise, it will increase the action of the conveyor.

Valve #1 controls the speed of the upper conveyor being displayed. Screwing the valve out will increase flow and speed.

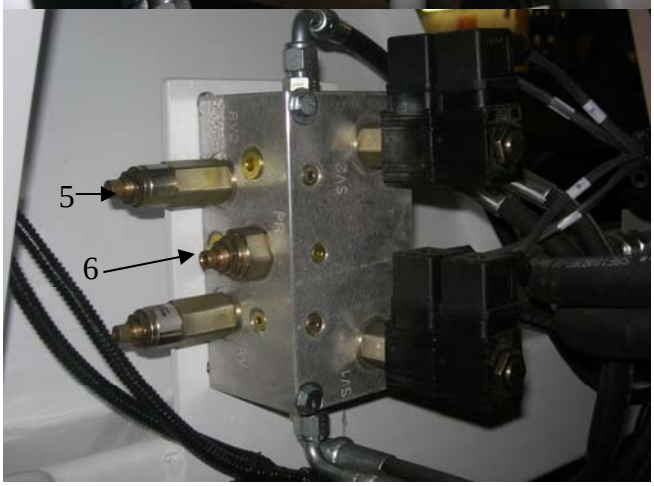
Valve #2 controls the speed of the upper conveyor being stored. Screwing the valve out will increase flow and speed.

The top valve located on the opposite side of manifold block is the pressure relief valve for these two valves. Screwing the valve in will increase the pressure relief.

To adjust any of these valves, loosen the 11/16" jam nut and use a 3/16" Allen wrench to turn the valve clockwise or counter clockwise. Turning the valve clockwise will increase the torque or pressure of the desired item. Likewise, turning the valve counter clockwise will decrease the torque or pressure of the desired item. To remove the valve, you will need a 7/8 wrench.

Valve #3 controls the storage and display of the unit. Control valves are located on the front manifold, toward the front of the cart.

Valve #4 controls the Fast speed of the conveyor located in the same manifold block as valve #1.



Valve #5 controls the slow speed of the conveyor. The valve is located on the rear manifold, at the rear of the cart.

Valve #6 controls the belt tension pressure. It is located in the same manifold block as valve #5. Turning the screw counter clockwise will decrease the pressure and clockwise will increase the pressure.

Grain-Weigh 200C Trouble Shooting

Problem:	**Cause:**
Incorrect Weights	Check System

-Verify unit is level so the weighing system works correctly.
-Verify that the decal is on “TOP” of the weighing bars for correct installation.
-Please check and reference Appendix X Quick Programming Guide in your Avery Weigh-Tronix manual and see if the Configuration Code Number (CCN) is properly entered for the scale application. If not known, please consult Par-Kan for assistance.
-If Configuration Code Number (CCN) is entered properly do a visual inspection of the scale system and check for:
    -Cable damage to weigh bar cables or junction box cable
    -Verify the supporting structure and weighing structure do not touch at any other point except at the weigh bars.
-Next if the scale is still not weighing properly, check for faulty weigh bars as follows:
    -Position a person or heavy object on the scale system above each weigh bar, one weigh bar at a time, and compare the weight readings.
    -All readings should be nearly identical to each other. If a reading is significantly different from the other readings, weigh bar could be defective and should be replaced.
-Find the cell that is not in the approximate weight as the other two and that is the bad cell. If the cells are all approximately the same weight then a weigh head could be the issue. Please contact Par-Kan Company to continue with this issue.

Grain-Weigh 200C Belt Alignment Procedure

Bottom Pulley Alignment

To align the belt on the lower pulley, first unbolt the bottom clean out door with a 9/16 deep well socket and let the door rest on the ground. Next, put the conveyor in the run position with the belt running (see pages 8-9). Once the belt is running, visually inspect that the belt is running in the center of the pulley. **DO NOT PUT YOU HANDS NEAR THE BELT.**

If the belt is not center on the pulley and is riding the left side of the conveyor, loosen the 3/4" nut on top of the motor bracket. Use the same wrench, and turn the all-thread clockwise. At each full revolution of the all-thread, inspect that the conveyor belt is center on the pulley. Once the belt is at the desired position, tighten both 3/4" nuts located on each side of the motor bracket to lock adjustment in place.

If the belt is riding on the right side of the conveyor, loosen the 3/4" nut on the bottom of the motor bracket. Use the same wrench, and turn the all-thread counter clockwise. Once the belt is in the desired position, tighten both 3/4" nuts located on each side of the motor bracket. Allow the belt to track for several minutes to ensure the belt is tracking on the center of the head pulley

Top Pulley Alignment

Top pulley has been factory aligned. Track the belt using only the threaded rod take up as referenced on the "bottom pulley alignment" above.

Grain-Weigh 200C Conveyor Cleanout Procedure

To remove almost all the grain out of the conveyor unit, first put the conveyor in the run position **without running the unit** (see pages 8-9). Once the unit is displayed, turn off the belt tension switch (3rd switch down) and begin storing the conveyor, this will retract the belt tension cylinder. At this point, **turn the unit off**. Use a 9/16" deep well socket and unbolt the bottom clean out door, letting the door rest on the ground. Grab hold of the belt cleats and pull them toward you, there should be slack in the belt for this to occur. By pulling the belt loose from the conveyor tube, this will release any grain captured between the bottom of the belt and the conveyor tube.

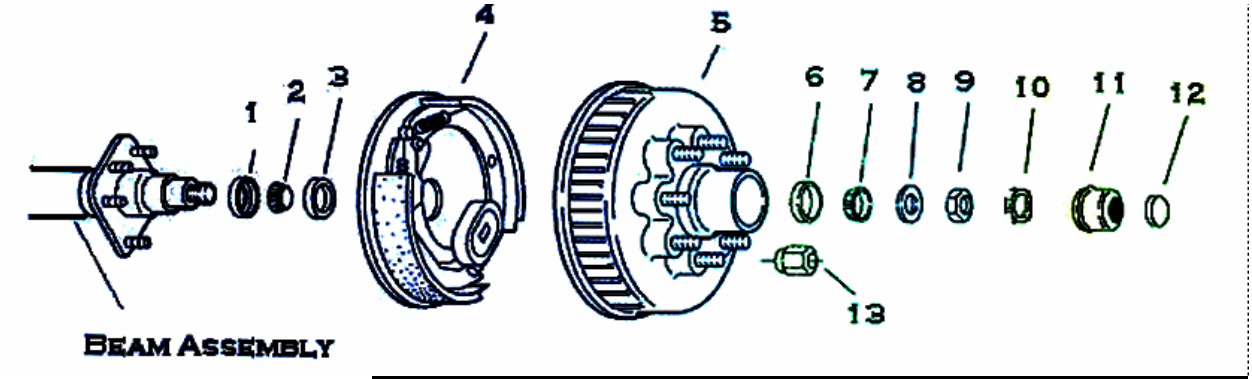
To complete a thorough cleaning of the unit, start the unit and open the seed door to its full extension. Turn off the conveyor unit and wash out the seed bin and conveyor belt. The water will drain out through the seed clean out door.

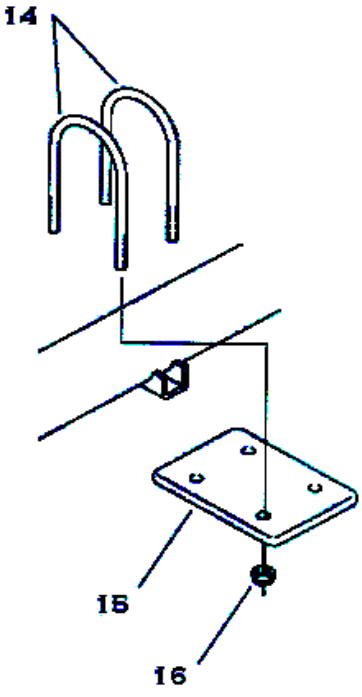
Once the unit is cleaned the desired amount, re-attach the clean out door. Start the unit, and store the conveyor. Unit is ready for your next delivery.

DO NOT TREAT SEED IN UNIT. TREATING SEED IN UNIT WILL VOID WARRANTY. PAR-KAN HAS NO RESPONISBILITY WITH TREATING SEED IN UNIT.

Grain-Weigh 200C Axle & Hub Assembly

7000 POUND Axle
Axis # SUPWH6642100



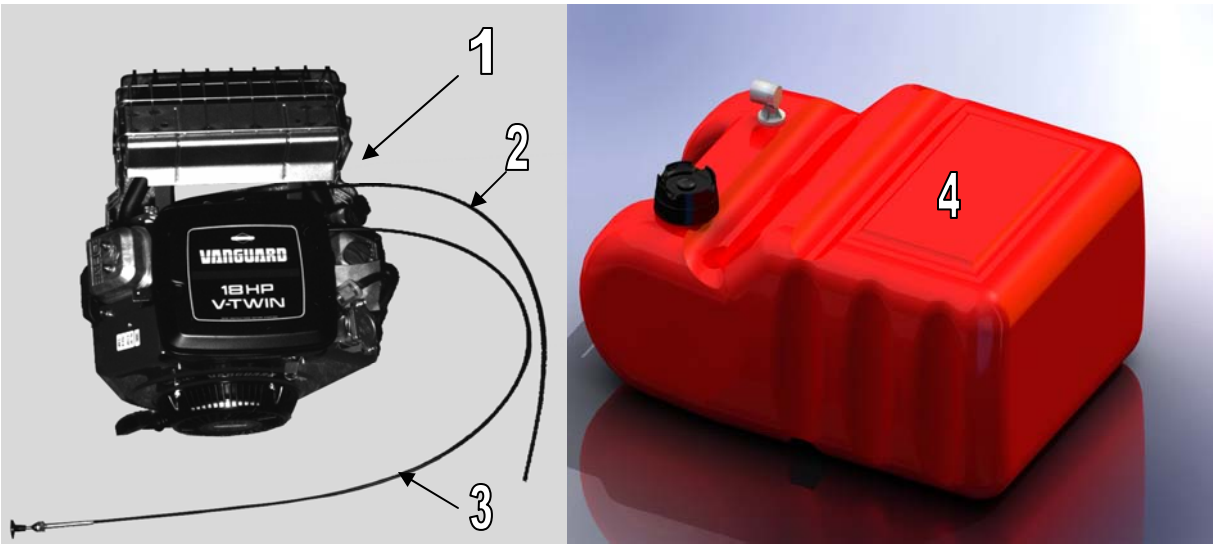


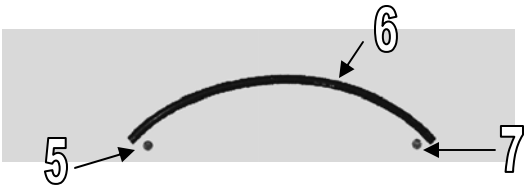
Grain-Weigh 200C Axle & Hub Parts Listing

Key #	Part Number	Description
1	241144	DL600 Seal
2	241145	Inner Bearing
3	241146	Inner Cone
4	241147	Left Hand Brake
4B	241148	Right Hand Brake
5	241149	Brake Drum
6	241150	Outer Cone
7	241151	Outer Bearing
8	241106	“D” Washer
9	241107	1-14 Slotted Jam Nut
10	241152	Tang Washer
11	241141	Dust Cap
12	241153	Rubber Plug for Dust Cap
13	241132	Cone Wheel Nut ½”
14	241154	U-Bolt – Zinc
15	241155	Tie Plate – Zinc
16	241156	½” Roll Lock Nut – Zinc
**	241157	Brake Mounting Bolts 3/8” x 1”
**	241158	Brake Mounting Lock Nuts 3/8”
**	241159	Brake Mounting Lock Washer 3/8”
**	241160	Brake Wiring Scotch-Lock Connectors
**	241161	Leaf Spring
**	241162	Beam Assembly (Axle Beam, Spindles, Spring Pads, Brake Flanges)

* Items not shown if full assembled state.

Grain-Weigh 200C Engine and Fuel Tank

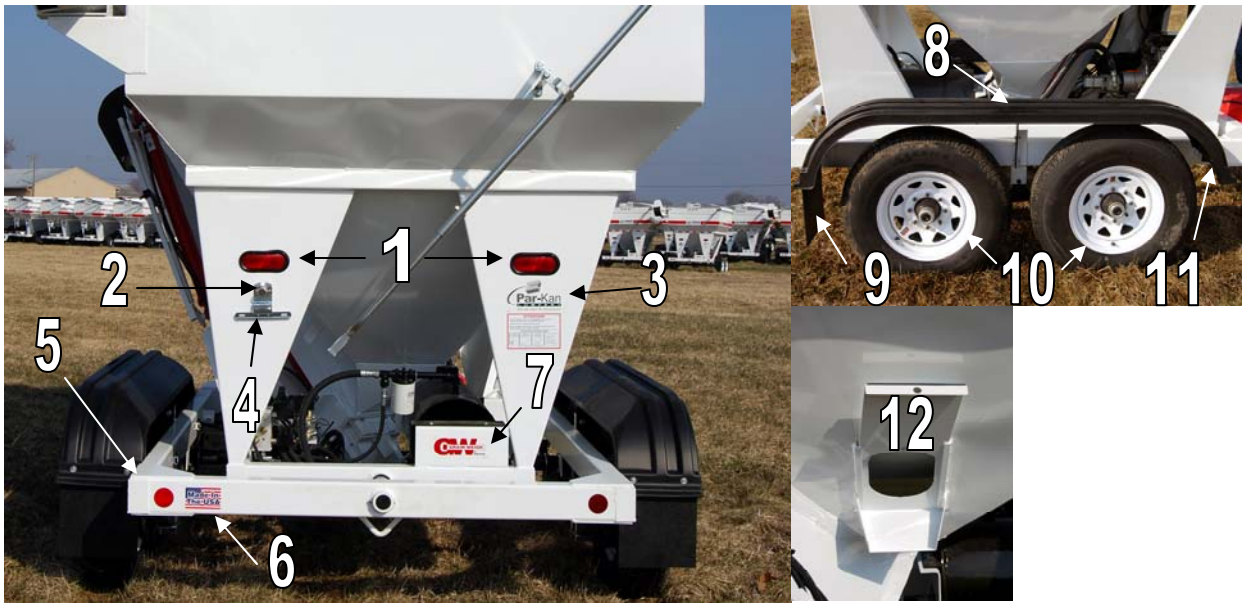




Key #	Part Number	Description
1*	GW150-6-SA-002	Assembled engine assembly. (Includes: ignition switch wiring, low oil shut off wiring, muffler guard, heat shield, parker pump, pump mount, motor oil, battery cable.) Does not include: throttle or choke cables
2	260100	Cable-Throttle
3	260110	Cable-Choke
4	GW150-7-SA-008	Gas Tank with fittings and hose assembled
5	220360	Gas line hose clamp
6	220319	Fuel hose, 1/4” I.D. X 20” length
7	220360	Gas line hose clamp

* Items not shown if full assembled state.

Grain-Weigh 200C Frame & Body (Rear View)



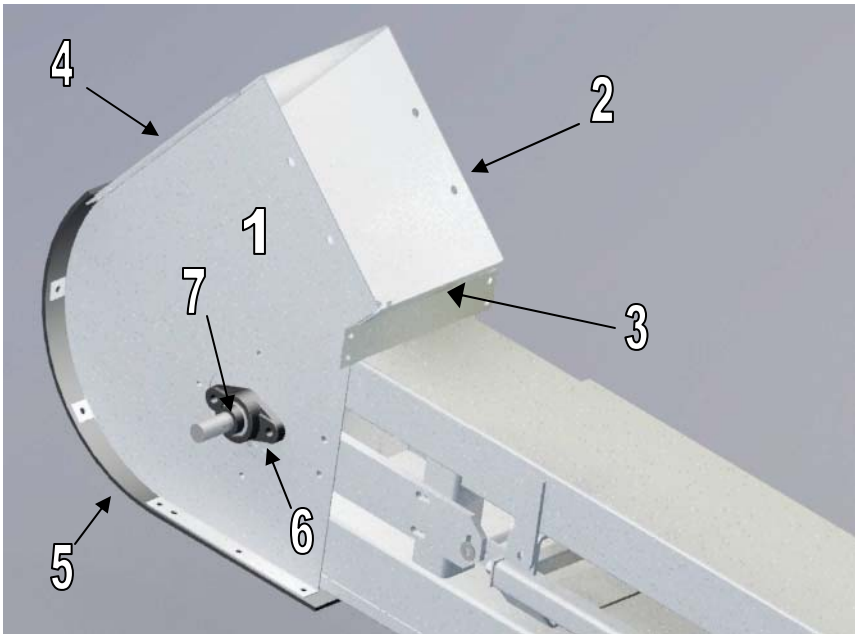
Key #	Part Number	Description
1	660020	Tail light assembly kit (Includes: taillight, grommet, and pigtail plug)
2	660010	License plate light
3	250069	Decal, Par-Kan Company Logo
4	660011	License plate bracket
5	250029	Reflector, 3” round red
6	250250	Decal, Made in the U.S.A
7	250100	Decal, Grain-Weigh
8	362024	Black Poly Fender—Tandem Axel
9	241204	Mud Flap
10	241083	Tire & Rim Assembly—GW200
11	GW200C-0W016	Fender Bracket Weldment
12	GW200A-1P601	Sample Door

Grain-Weigh 200C Frame & Body (Front View)

Grain Weigh 200C Frame & Body (Front View) Continued

Key #	Part Number	Description
1	280057	Ball Coupler– 2-5/16”
2	270282	Safety Chains
3	GW200C-6W000	Ladder Weldment
4	280100	Tongue Jack with Swivel wheel
5	270013	Cam lock, (Grain-weigh box)
6	361559	Sight Glass Square
7	362077	Conveyor protector shield Blk GW200C
8	362035	Belt, Conveyor
9	220477	Pressure Gauge
10	430069	Hyd. Cyl. 2” X 36”, Push out arm / Belt Tension
11	640042	Switch, limit side mount roller / lever GW200C
12	430059	Hyd. Cyl. 2 1/2” X 36”, Std. Port GW200C / Conveyor Display
13	660012	Light, Weigh tronix box
14	620101	Tachometer
15	260005	Key Switch
16	260110	Choke Lever
17	260100	Throttle Lever
18	640195	Weigh Scale Head (Model 640 Weigh Tronix)
19	640024	Switch, Toggle SPST
20	640085	Indicator Light, LED
21	640022	Switch, Toggle SPTD
22	640021	Switch, Toggle SPDT
23	640059	Switch, Toggle DP-ST

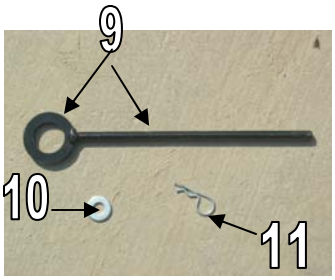
Grain-Weigh 200C Top Shroud and Pulleys



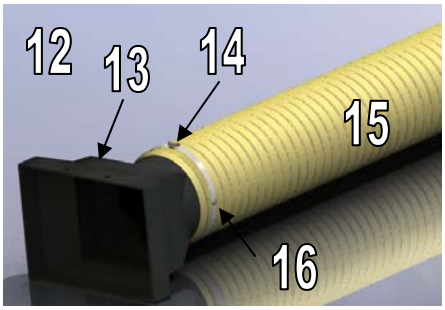
Key #:	Part Number:	Description:
1	GW200C-3P300	Delivery Shroud Right
2	GW200C-3P301	Delivery Shroud Left
3	GW200C-3P302	Delivery Shroud Rear Cap
4	GW200C-3P303	Delivery Shroud Front Cap
5	362076	Conveyor, Delivery Shroud Black GW200C
6	280201	Bearing, Flange Type / 1” 2-Bolt
7	220499	Set-Screw Shaft Coupling 1”
8	231300	Roller, Primary 5-1/2" X 7-1/2" / Lagged
9	231301	Roller, Top 6” X 8” / Smooth

Grain-Weigh 200C Seed Tubes

Key #	Part Number	Description
1	GW200C-9A041	3 Section Seed Tube Assembly
2	362031	Seed Tube, Telescoping 5” D 3 Section
3	210075	Pop Rivet
4	361198	5” Flex Hose
5	220366	Hose Clamp, 6” Stainless Steel
6	362036	Seed Tube, Reducer-GW200C
7	362019	Seed Tube Adapter



Key #	Part Number	Description
9	GW200C-9W700	Top Conveyor Adapter Pin
10	217201	Washer, 3/8” USS Flat Zinc
11	210112	Hair Pin Clip



Key #	Part Number	Description
12	GW200C-9A040	8” Flex Seed Tube Assembly
13	362019	Seed Tube Adapter
14	220367	Hose Clamp
15	362041	8” Flex Hose
16	210075	Pop Rivet

Grain-Weigh 200C Decals

WARNING
TO PREVENT SERIOUS INJURY OR DEATH FROM MOVING PARTS:
* KEEP HANDS, FEET, AND CLOTHING AWAY FROM MOVING PARTS.
* CLOSE ALL GUARDS AND SHIELDS BEFORE OPERATING MACHINERY.
250018
1

NOTICE
Thoroughly clean out unit after handling treated seed to prevent contamination of untreated seed or commercial grain.
3

WARNING
USE 2 5/16" BALL WITH SAME OR GREATER CAPACITY THAN TRAILER GVW (14,000 LBS)
La ADVERTENCIA
UTILICE 2 5/16" LA BOLA CON la CAPACIDAD MISMA O MAS GRANDE QUE REMOLQUE GVW (14.000 LBS)
4

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PLACE ONLY THE LOWER PORTION OF THIS DECAL IN A LOCATION VISIBLE TO THE OPERATOR OR ALL WARRANTIES ARE VOID!!
ATTENTION!
THE TARP MUST BE KEPT TO A RECOMMENDED 40-60 LBS. OF TENSION OR EXCESSIVE TARP WEAR MAY OCCUR.
DO NOT WALK OR STAND ON THE END CAPS.
DO NOT OPERATE THIS VEHICLE AT HIGHWAY SPEEDS, WHILE THE TARP SYSTEM IS IN THE "OPEN" POSITION!
OPERATING INSTRUCTIONS
Shur-Co.,Yankton, SD 1-800-4 SHUR-LOK
14

CAUTION
• Personal injury or property damage may occur from improper use.
• Read and understand operators manual before using this equipment.
• Phone 800 291-5487 for replacement manual.
Part No. 250063
15

16

17

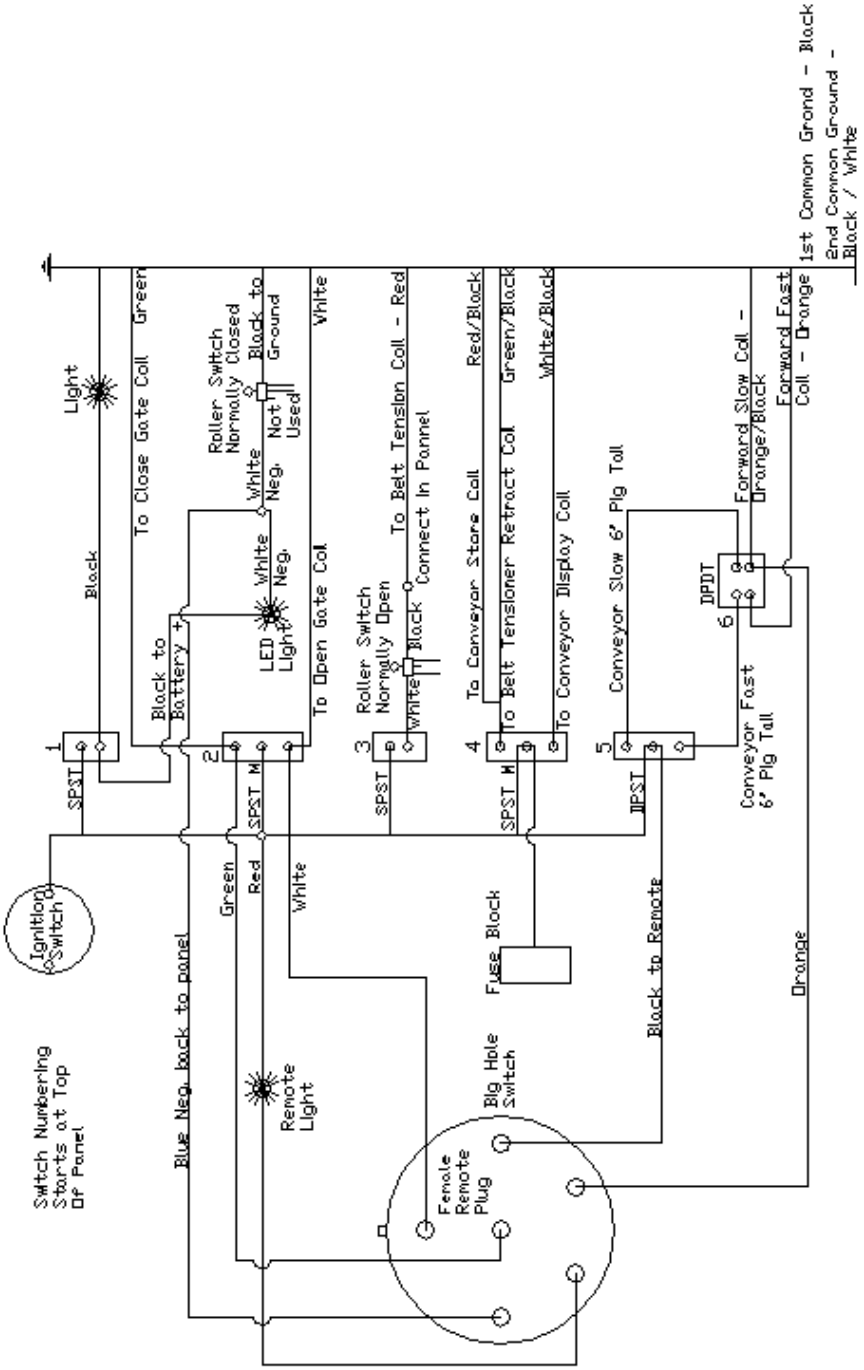
18

19

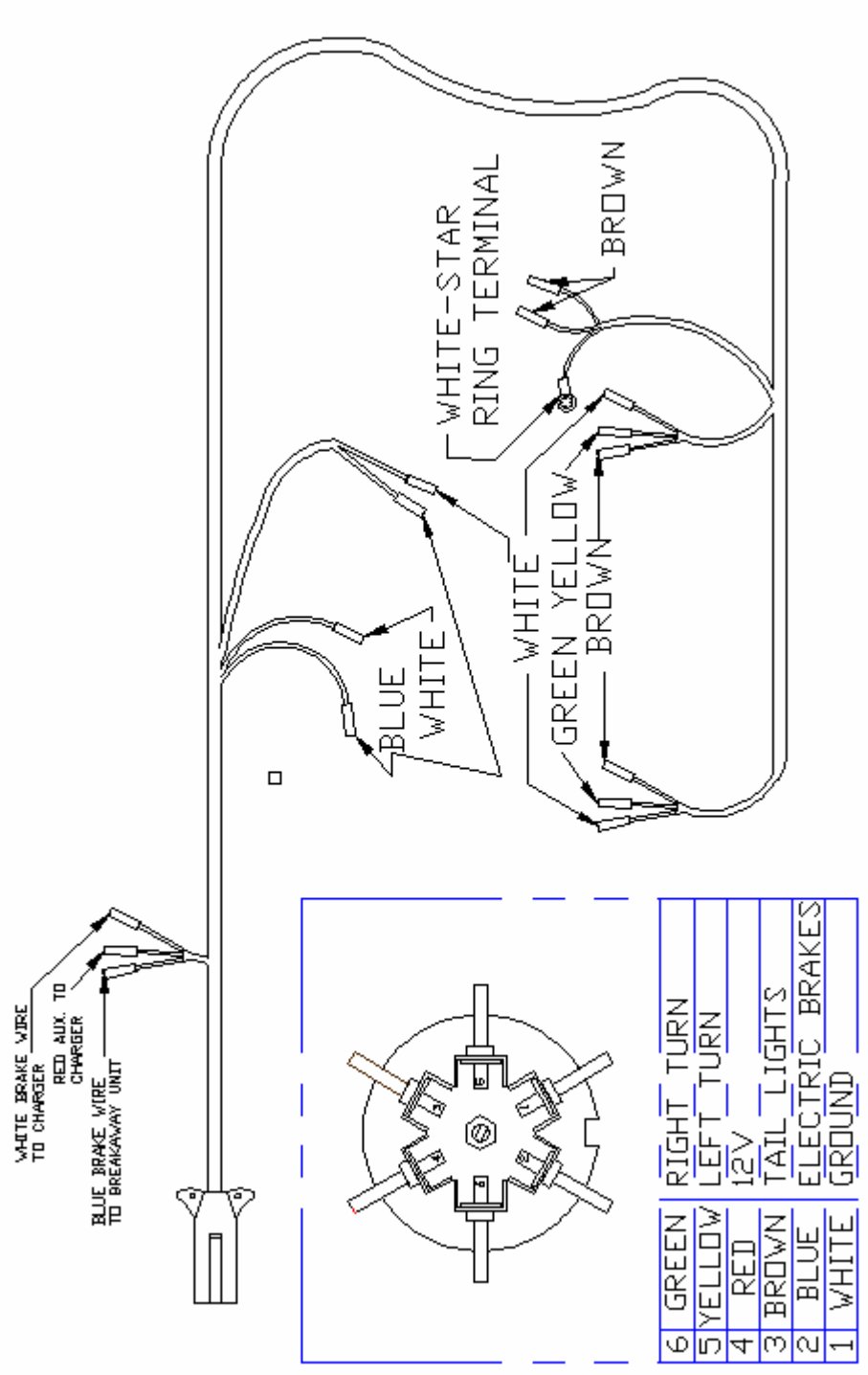
Grain-Weigh 200C Decals

Number:	Part Number:	Description:
1	250018	Decal, Warning, Keep Hands, Feet, Etc.
2	250101C	Decal, Toggle Switches
3	250051	Decal, Treated Seed
4	250104	Decal, Warning: Use 2-5/16” Ball E&S
5	250112	Decal, Caution: Pinch Point
6	250105	Decal, Warning: Read User’s Manual (GW)
7	250101B	Decal, Slow (Small)
8	250101D	Decal, Open (Large)
9	250101A	Decal, Fast (Small)
10	250101E	Decal, Close (Large)
11	250057	Decal, Be Careful Overhead Wires (No Arrow)
12	250027	Decal, Watch Your Step
13	250016	Decal, Be Careful Overhead Wires (Arrow)
14	With Roll Tarp	Decal, Roll Tarp Information
15	250063	Decal, Caution: Manual Replacement
16	250100	Decal, Grain Weigh (Small) Red/Black On White
17	250000	Decal, Par-Kan (6-1/4” X 4-1/2”)
18	250250	Decal, Made In The USA
19	250101F	Decal, 3000 RPM Maximum (Black Lettering)

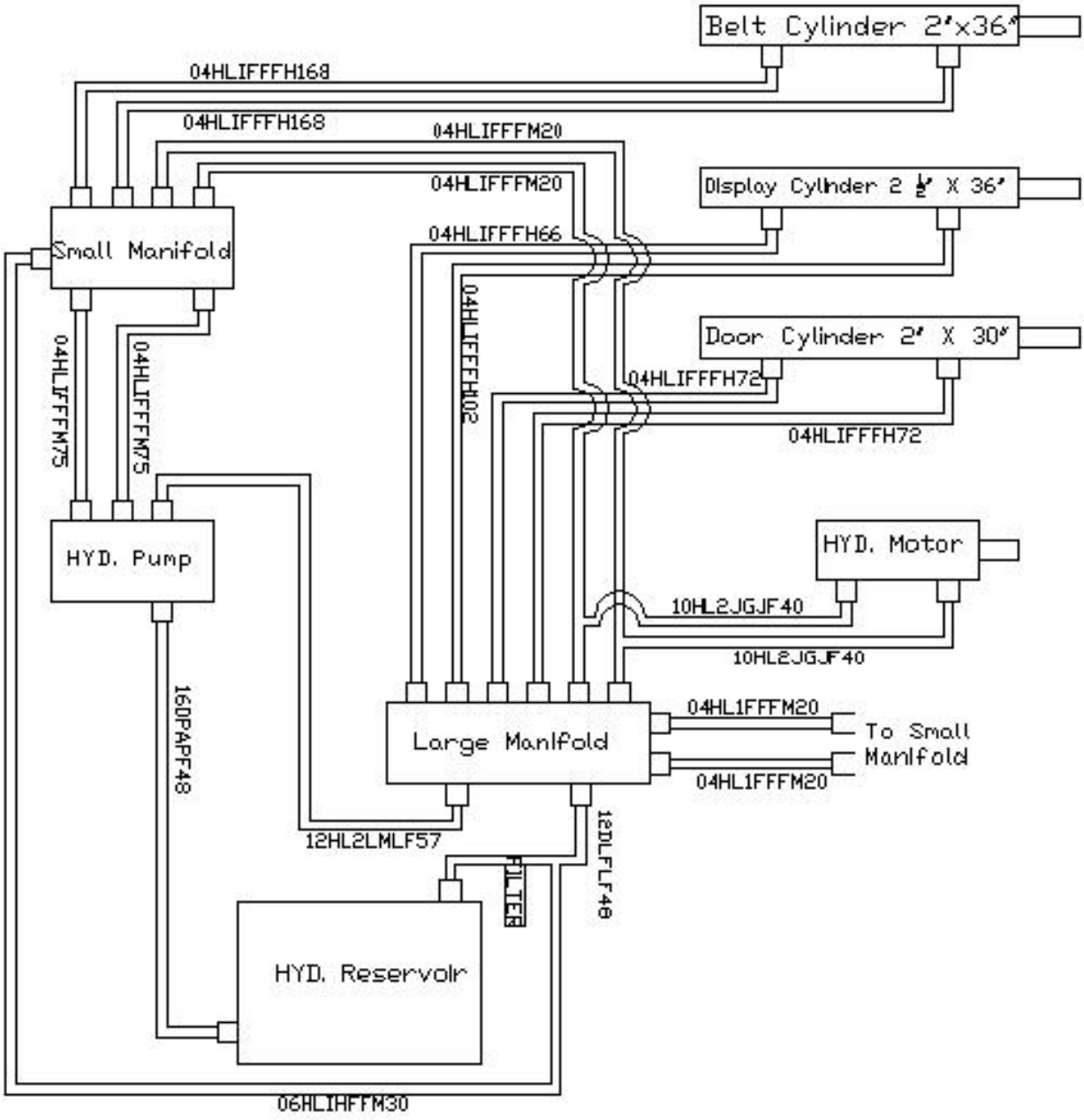
Grain-Weigh 200C Electrical Schematic for Switch Panel



Grain-Weigh 200C Trailer Electrical Schematic



Grain Weigh 200C Hydraulic System



Par-Kan COMPANY

Grain Weigh 200C Hydraulic System

Grain Weigh 200C Hydraulic Parts Listing

Key #	Part Number	Description
1	420031	Hydraulic Adapter, #6FORB X 1/4” NPT
2	420015	Hydraulic Adapter Elbow, #6JIC X #6MP090
3	420022	Hydraulic Adapter, #12ORB X #12JIC
4	440611	Hydraulic Oil Filter with Spin on Cartridge
5	440024	Hydraulic Adapter, #12ORB X #12JICM Elbow
6	420024	Hydraulic Adapter, #12ORB X #12JICM
7	430070	2” X 30” GW200C Gate Cylinder
8	430069	2” X 36” GW200C Belt Cylinder
9	430059	2 1/2” X 36” STD Port Display Cylinder
10	440003	Manifold Block Assembly with Check Valve “Main”
11	440013	Manifold Block Assembly with Check Valve “Secondary”
12	430005	Hydraulic Tank
13	440000	1/4” Flow Control Valve
14	220579	Shaft Coupling (1”)
15	220581	Shaft Coupling—Spider
16	220580	Shaft Coupling (5/8”)
17	430009	Pump Mount—GW Adapter
18	440617	Hydraulic Flow Ezy Breather
19	440615	Hydraulic Strainer
20	430011	Hydraulic Motor
21	420011	Hydraulic Adapter, #12JIC X #10ORB
22	420055	Hydraulic Adapter, 1 5/16”JIC X 1 1/16ORB
23	410132	Hose, Small Manifold to Belt Cylinder, 1/4” X 168”
24	410137	Hose, Pressure Gauge to Cylinder, 1/4” X 22”
25	410126	Hose, Small Manifold to Large Manifold, 1/4” X 20”
26	410129	Hose, Small Manifold to T, 3/8” X 30”
27	410019	Hose, Large Manifold to Door Cylinder, 1/4” X 72”
28	410130	Hose, Large Manifold to Display Cylinder, 1/4” X 66”
29	410127	Hose, Hydraulic Pump to Small Manifold, 1/4” X 75”
30	410131	Hose, Large Manifold to Display Cylinder 1/4” X 102”
31	410014	Hose, Hydraulic Reservoir to Hydraulic Pump, 1” X 48”
32	410125	Hose, Large Manifold to T, 3/4” X 48”
33	410015	Hose, Hydraulic Pump to Large Manifold, 3/4” X 57”
34	410128	Hose, Large Manifold to Hydraulic Motor, 5/8” X 40”
35	430026	Hydraulic Pump

Grain Weigh 200C Towing Safety Appendix

Towing the Grain Weigh Cart is designed to be safe provided some basic precautions are taken. It is the responsibility of the operator to ensure these procedures are followed for the safety of yourself and others on the road. In addition, due to the variety of laws you should check local and/or state requirements.

Some common reasons for towing accidents include the following:

- Failure to properly connect the coupler and/or safety chains.
- Overloading trailer, towing vehicle, or safety devices.
- Towing with excessive speeds.
- Damaged or improperly maintained towing equipment.

Items to consider before towing the Grain Weigh 200C Cart:

-Check the payload rating on your towing vehicle(s), and equipment to ensure they can meet the requirements for pulling this trailer.

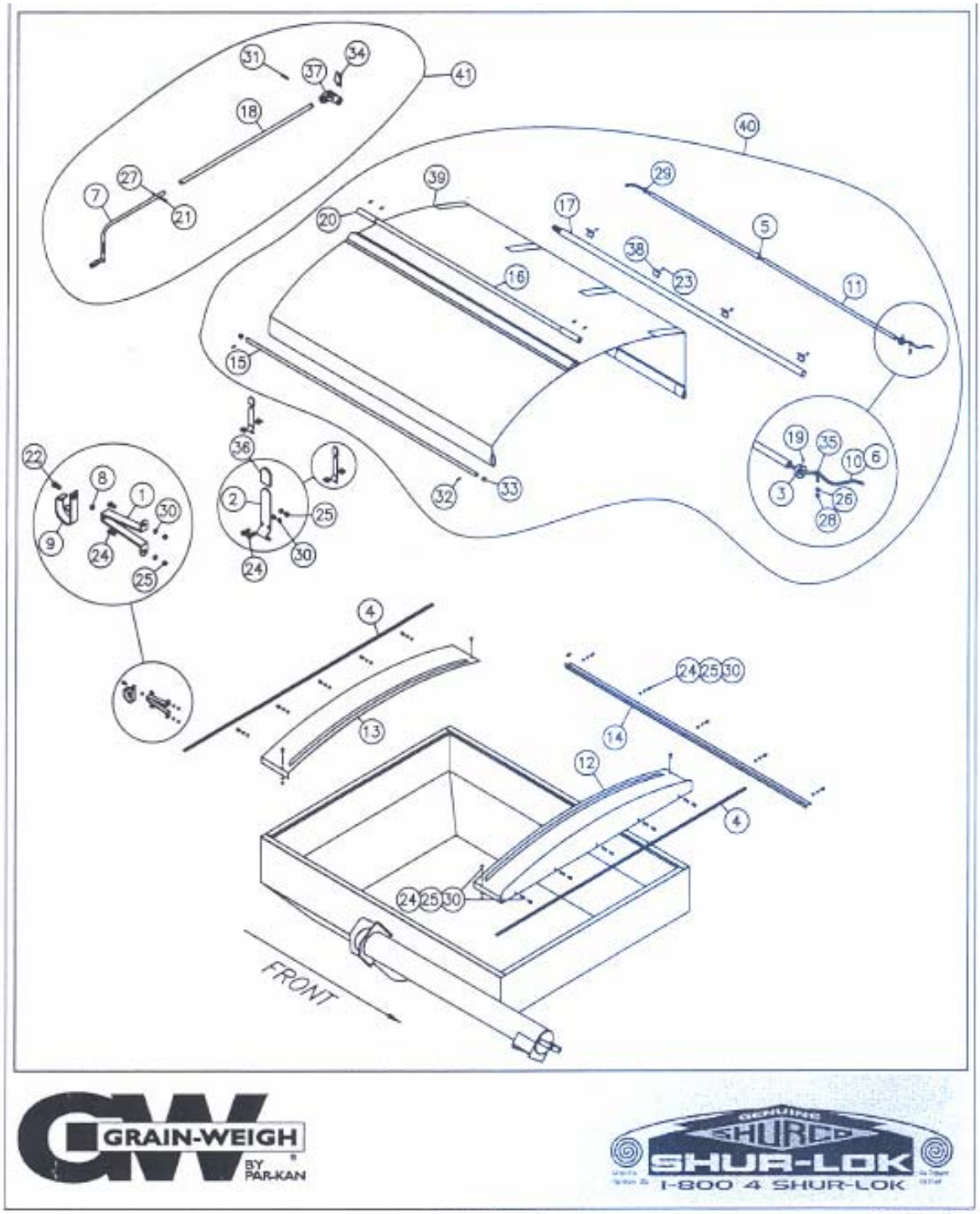
- Regular inspections should be made to safeguard against failure due to damaged towing and safety equipment. Some of these items include safety chains, hydraulic brake system, turn signals and taillights.
If one or more of the links or fittings on the safety chain is stretched, broken, or deformed it should be replaced. Always replace entire chain assembly.

- Safety chains should be connected to the towing vehicle and trailer so the slack for each length of chain is approximately the same when the vehicles are aligned on a common front to rear centerline. There shall be no more slack than necessary to permit proper turning of the vehicles. The safety chains shall be crossed under the trailer tongue and connected to the hitch assembly of the towing vehicle.

Note: Crossing the chains under the tongue typically reduces the probability of stressing or breaking the chains when turning.

Figure 3 – Standard Ball Coupler

Grain Weigh 200C Shurco Replacement Parts



APPENDIX B 01/01/01

Grain Weigh 200C Shurco Replacement Parts

Key #	Part Number	Description
1	361544	Crank Stand-Off 7”
2	361521	Tarp Stop
3	361529	Roll Return End plug – Nylon
4	361512	Trim Seal 110” long
5	361549	Roll Return Tube 46”
6	361546	Stretch Rope, 124” long
7	361542	Crank Arm Assembly
8	361548	Retainer Bushing
9	361541	Crank Retainer
10	361535	Rope Guard
11	361540	Roll Return Tube
12	361511	Font Bulkhead
13	361510	Rear Bulkhead
14	361539	Side Mount Latch
15	361538	Fixed Tube
16	361537	Ridge Pole
17	361536	Roll Tube with Spline
18	361530	Crank Extension
19	361534	Screw, 8-32: x 3.8” Self Tapping
20	361525	Protective Cap
21	361527	Cap Screw, 3/8” x 1-3/4”
22	361543	Cap Screw, ½” hex
23	361518	Screw, ¼” x ¾” Self Tapping
24	361547	Screw, 3/8” x 1” Self Tapping
25	361545	Hex Nut, 3-18”-16 Zinc
26	361533	Nut, 5/16” Hex
27	361550	Locknut, 3/8” – Centerlock
28	361532	Locknut, 5/16” – Nylon
29	361526	Flat Washer, 3/8”
30	361523	Lock Washer, 3/8”
31	361522	Spring Pin, 3/8” x 2’
32	361524	Nylon Truck Rivet
33	361516	Universal Round Insert, 1-1/8”
34	361520	Wire Lock Pin, 3/8” x 2-1/2”
35	361531	Eyebolt Anchor, 5/16” x 1”
36	361519	Protective Cap
37	361515	Splined U-Joint, 1-1/4” x 8”
38	361517	Plastic U-Clamp
39	361508	Tarp Only
40	361514	Tarp Cover Assembly with Poles & Tube
41	361509	Crank Assembly

Model 640 Weigh Tronix Calibration Procedure

Model: 640

1. Press the **On/Off** button and the greeting **"Hello"** should arrear on the screen and then the scale will return to zero.

2. From the G/N mode, press and hold **the HOLD/MENU** key for three beeps (3 sec.) then release… **SET.PAS** is displayed

3. Press the **RM** button until the number **6** is displayed then press the **HOLD/MENU** button to move the cursor one position.

4. Press the **RM** button until the number **4** is displayed then press the **HOLD/MENU** button to move the cursor one position.

5. Press the **RM** button until the number **0** is displayed then press the **PRINT/SELECT** button once…**CONFIG** should be displayed.

6. Press the **HOLD/MENU** button until….**SPAN** is displayed

7. Press the **PRINT/SELECT** button and now the current weight should be displayed.

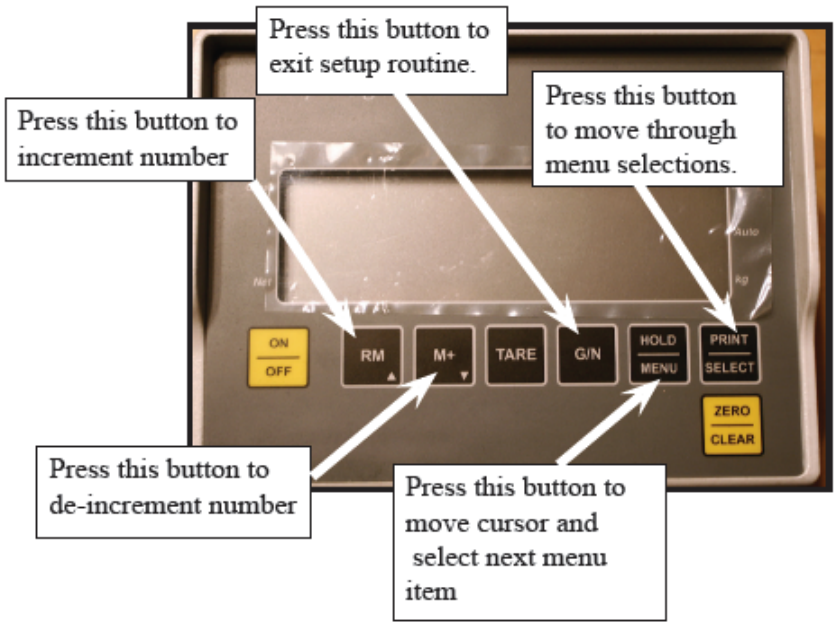
8. With either a calibrator or some known weight, put an appropriate weight onto the scale… and the current weight is displayed.

9. Press the **RM** key to increase the weight or the **M+** key to decrease the weight accordingly.

10. Once the appropriate weight value is shown, press the **PRINT/SELECT** button… **SPAN** should be displayed on the screen.

11. Press the **G/N** button until the indicator returns to the gross weighing mode. Calibration of the scale is then complete.

Setup Procedure for Weigh-Tronix 640M an 640 Indicator when used with external remote display.



Buttons used to setup scale for remote display.

Agri-Tronix Corporation • 2001 North Morton Street • Franklin, IN • 46131 • 1-800-445-5058

640 SETUP....

The 640 style indicators needs to have the parameters set correctly to operate a remote display. The following pages will instruct you step by step on how to accomplish this.

Place the scale in "SETUP MODE" so the parameters can be set.

A. Press and hold the Hold Menu button for 3 seconds and then release after the 3rd beep from the internal horn. "SET.PAS" will be displayed (SET Parameters).

Note- If no button is pressed for 10 seconds the indicator will exit the setup mode.

B.Press the up arrow key button 7 times or until the number 6 is displayed in the first position on left.. If you increment past 6, you can keep pressing the up arrow key until 6 is shown again.

C.Once the 6 is displayed, press the "Menu" key to increment the cursor to the next number on the right.
D. Press the up arrow key until a "4" is displayed.
E. Press the "MENU" key to increment to the next digit on right.
F. Press the "UP ARROW" key until a zero is displayed on the screen.
G.Press the Print/Select Key twice and this will place you in the Configuration Mode.

Model 640 Weigh Tronix Adding LED Light Procedure

The section that needs to be configured is labeled RS232.
A. To get to that section of the setup, continue pressing and releasing the "MENU" button until "RS232" is displayed on the screen.
(The "MENU button" will need to be pressed and released eleven times)

B. Press the "Select Key" to enter the RS232 setup mode.

C. Continue pressing the Menu key until the word "LAYOUT" appears on the screen.

D. Press the Select Key while the word "LAYOUT" is shown on the screen.

E. Press the "MENU key" until the word "REMOTE" appears on the screen.

F. Press the "Select key" and the word "LAYOUT" will appear on the screen.

G. Press the "G/N key" several times (normally 3 times) until the display reads "BUSY"

H. The indicator will now be in normal run mode and is ready to use.

The other parameters in the RS 232 section should be correct from the factory settings. In the event the other settings have been changed, use the setup procedure outlined in this instruction sheet to set the other RS232 parameters to the following values.
Baud = 9600
Parity = NONE
Data = 8
Hand = NONE
Layout = REMOTE
Auto = OFF

Model 640 Weigh Tronix Adding LED Light Procedure

The remote display is powered from the 8 pin connector located next to the load cell connector of the 640M indicator.

When the display is powered off the remote display will blank and enter into a "sleep mode" until the indicator is powered up.

When the remote is first powered up, it will display 123456 and then blank the display until a signal is received from the scale indicator.

If no signal or the wrong signal (incorrect parameter settings) are received, the display will remain blank.

Contact Information

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